A STARTUP CIRCUIT FOR ANALOG INTEGRATED CIRCUIT APPLICATIONS

ABSTRACT OF THE DISCLOSURE

A startup circuit is used for producing a startup current for an analog integrated circuit device. The startup circuit includes a first portion including a diode component and a capacitance component. The first portion is configured to function as a power supply backup and generate a backup point voltage. The startup circuit includes a second portion including a current mirror component and a feedback component. The second portion is configured to generate a startup current using the backup point voltage, such that the startup current is provided based on the backup point voltage as a power supply voltage increases from a power off condition or a transient, thereby keeping an analog circuit alive during transients in power supply for fast recover and operation.